Arizona Dental & DENTAL HYGIENE Workforce Survey 2003-2004







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# Arizona Dental and Dental Hygiene Workforce Survey 2003-2004

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The Arizona Department of Health Services, Office of Oral Health acknowledges the following partners for their contributions to this survey:

Arizona Department of Health Services, Office of Health Systems Development

Arizona Board of Dental Examiners Arizona Dental Association Arizona State Dental Hygienists' Association Kneka P. Smith R.D.H., M.P.H.

We thank the dentists and dental hygienists who participated in the pilot survey, and of course, all of the dentists and dental hygienists who took the time to fill out the survey to help us all better understand the dental workforce in Arizona.

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The Arizona Department of Health Services is an Equal Employment Opportunity Agency.

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The Arizona Department of Health Services (ADHS), Office of Oral Health (OOH) collaborated with the Office of Health Systems Development (OHSD), the Arizona Board of Dental Examiners (BODEX), the Arizona Dental Association (AzDA), and the Arizona State Dental Hygienists' Association (ASDHA) to develop a dental workforce survey/questionnaire for all Arizona licensed dentists and dental hygienists.

### Purpose:

The purpose of the survey was primarily to collect federally required information necessary to complete applications for Health Professional Shortage Area (HPSA) designations in a manner convenient to dentists.

The purpose of the survey was also to:

- Collect information on items of interest to collaborators
- · Try an ongoing method for tracking distribution and practice trends of the dental workforce in Arizona
- Compare results to the Dental Hygiene Workforce Survey conducted in 1996.

#### Methods:

All Arizona licensed dentists and dental hygienists received an itemized questionnaire between 2003 - 2004. The completed questionnaires were returned to Arizona BODEX and ADHS, OOH. They were entered and analyzed using a statistical package.

The following information in graphs and tables includes those providers with an Arizona practice / residence address, and indicating that they currently practice in the field of dentistry.

Arizona Licensed Providers						
BODEX Licenses (FY 03-04)  Total Respondents Arizona Practice / Residence Address and Currently Practicin						
Dentists	3595	2380	2041			
Dental Hygienists	2805	1065	830			

## Notes on Interpretation of the Data

- Information was collected from respondents about dental practices. Respondents may have reported on more than one practice.
- "Urban" counties include at least one community with a population of 500,000 or more. "Rural-Urban" counties include at least one community with a population of 50,000 or more. "Rural" counties include only those communities with populations of less than 50,000. (definitions from the Arizona Rural Health Office)
- "Currently practicing" for dental hygienists is defined as having listed an Arizona practice address or working more weeks in Arizona than in another state.
- Some questions were deleted after the first year (2003) and one question was added after 2003. These specifics are noted when applicable.
- Percentages may not total 100% due to rounding.
- For more information on the workforce survey please visit our website. (www.azdhs.gov/cfhs/ooh)



If Arizona's dental workforce mirrors the population racially and/or ethnically, will this improve access to care?

Race / Ethnicity of Dental Providers					
Dentists Dental Hygienists Population 2000					
American Indian / Alaskan Native	1%	2%	1%		
Asian	<b>9</b> %	1%	4%		
Black	1%	0%	12%		
Hispanic	4%	4%	11%		
White	84%	91%	72%		
Other / Multi-racial	1%	2%	NA		
Column Total	100%	100%	100%		

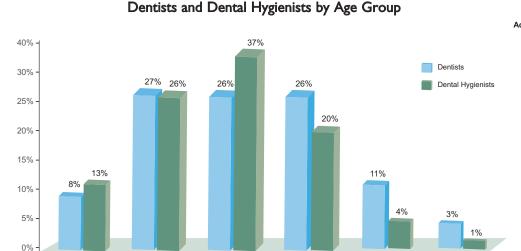
Volunteer for Oral Health Events Outside of Work				
Provider Percent Average Hours Volunteered / Year				
Dentist 58% 23				
Dental Hygienists 51% 9				

Percent of Dental Providers who

The most common volunteer settings for dentists and dental hygienists were school based activities, health fairs, and community clinics.

Dentists and Dental Hygienists reported the most significant challenges for the dental profession in the next five years as access to care, dental insurance issues, and the number of dental providers.

If these challenges are realized, how are policy makers addressing these needs?



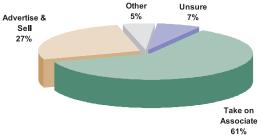
50-59

60-69

40-49

30-39

## Dentists' Plans for Practice Upon Retirement



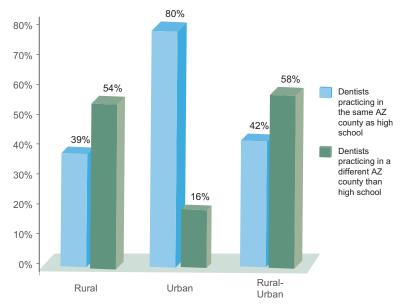
Of those who listed a retirement year:

- 47% of dentists plan to retire by the end of 2015
- 59% of dental hygienists plan to retire by the end of 2015

If 47% of dentists do retire by 2015, what is the plan to meet the needs of the growing population?

28% of dentists practicing in Arizona graduated from high school in Arizona. Of those, 72% returned to practice in the same county from where they graduated high school.

## Percent of Dentists Practicing in the Same Arizona County from Where They Graduated High School



## **Dental Schooling**

At the time of this survey, no dentists graduated from dental schools in Arizona.

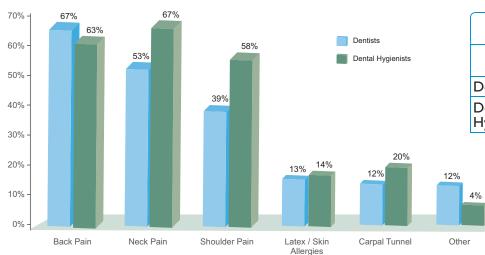
55% of the dental hygienists graduated from dental hygiene programs in Arizona.

If high school students are recruited for dental school from dental health care shortage areas, will this increase the number of dentists providing care in underserved areas?

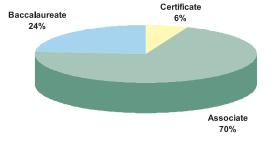
Less than one third of dental hygienists reported having medical insurance, sick days, or a retirement benefit.

If employee benefits for dental hygienists improve, will it increase retention in clinical practice?

#### Percent of Providers Reporting Health Problems



## Entry Level Degree for Dental Hygienists



Health Problems Attributed to the Practice of Dentistry				
Percent with Mean Number of Health Problems				
Dentists	21%	1.9		
Dental Hygienists	75%	2.4		

If serious strides are made to prevent occupationally related health problems, will this increase longevity in the career?

National Rank of Arizona Providers to Population: (Best = 1/50 states)				
Rank				
Dentists	41 / 50			
Dental Hygienists	24 / 50			

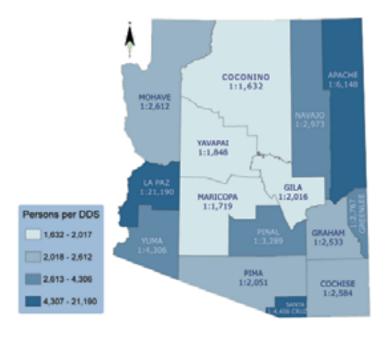
The dentist-to-population ratio and the dental hygienist-to-population ratio in rural Arizona are well below that of the national averages.

Two counties, Greenlee and La Paz, have no dental hygienists.

La Paz County has only one dentist.

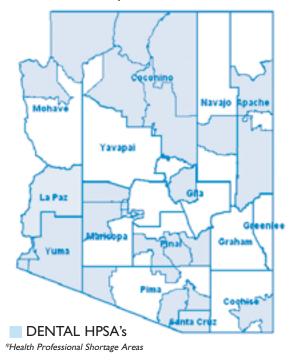
If underserved counties want a dental provider, how will this need be met?

## Dentist-to-Population Ratio



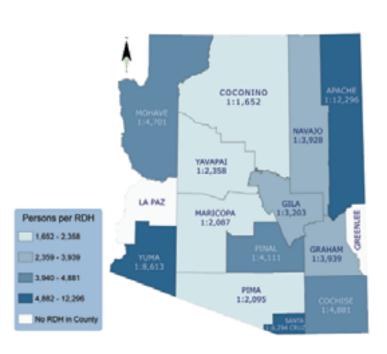
## **DENTAL HPSA\*** Designations<sup>3</sup>

September 2006



## Dental Hygienist-to-Population Ratio

National I:2,004<sup>1</sup> Arizona I:2,325<sup>2</sup>



Proportionately more dentists and dental hygienists practice in urban locations.

## Number of Dentists Who Submitted at Least One Medicaid\* Dental Claim During Fiscal Year 2005

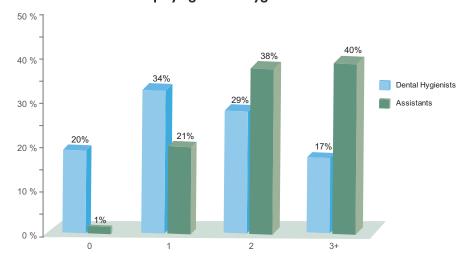
County	Number
Apache	30
Cochise	13
Coconino	35
Gila	15
Graham	4
Greenlee	I
Maricopa	573
Mohave	14
Navajo	18
Pima	150
Pinal	25
Santa Cruz	7
Yavapai	42
Yuma	16
La Paz	2
Out of State	27
Total	972

\*Arizona Health Care Cost Containment System (AHCCCS)

## If more dentists are AHCCCS dental providers, will this reduce oral disease in Arizona?

92% of dental practices are in a private practice setting. The remaining 8% are in hospitals, non-profit settings, group settings, prisons, military settings, colleges, and in Indian Health Service (IHS) settings and other federal agencies.

## Percent of Offices Employing Dental Hygienists and Assistants



Top 3 reasons why dentists do not employ a dental hygienist

- Prefer to do hygiene myself
- Salary too high
- Patient load too low

Percent of Practices Accepting Patients		
Percent		
New Patients	97%	
New Medicaid* Patients 24%		

\*Arizona Health Care Cost Containment System (AHCCCS)

62% of offices offer language interpretation services. Of those offering services, 74% provide interpretation in Spanish.

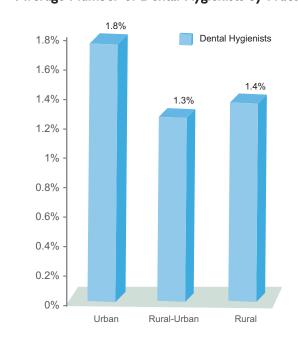
	Average Hours Worked per Week	Average Weeks Worked per Year	
Dentists	35	46	
Dental Hygienists	29	44	

If dentists employ more dental auxiliaries, will this improve dental services?

Over 80% of dentists do not see children under the age of 3. The American Dental Association and American Academy of Pediatric Dentistry recommends the establishment of a dental home by the age of one.

If dental specialists are needed in rural Arizona, how will we meet these needs?

## Average Number of Dental Hygienists by Practice

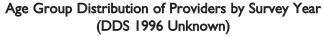


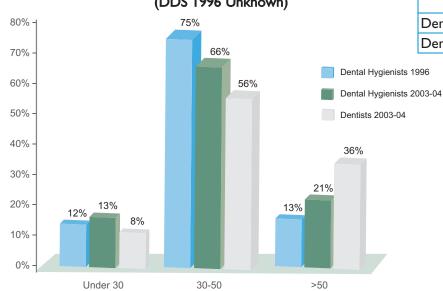
	Distribution of Specialties*									
Category	General Dentistry	Endodontics	Orthodontics	Pathology	Pediatric Dentistry	Periodontics	Public Health	Prosthodontics	Radiology	Oral Surgery
Rural	13%	7%	8%	0%	18%	9%	0%	6%	100%	10%
Rural-Urban	3%	2%	4%	0%	7%	5%	0%	5%	0%	14%
Urban	84%	91%	88%	100%	75%	86%	100%	89%	0%	76%
Column Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

<sup>\*</sup>Providers reporting 50% or more of their practice spent in specialty

Arizona Population Estimates <sup>2</sup>				
1995	Percent Increase			
4,218,000	5,939,292	41%		

Arizona Licensed Dental Providers In-State <sup>3</sup>					
FY96/97 FY04/05 Percent Increase					
Dentists	2107	3023	44%		
Dental Hygienists 1477 2618 77%					





Providers Who Indicated that They Were NOT Currently Practicing in the Field of Dentistry					
1996 2003-04					
Dentists	NA	5%			
Dental Hygienists 11% 10%					

Average Age of Practicing Dental Providers				
	1996	2003-04		
Dentists	48	46		
Dental Hygienists	40	42		

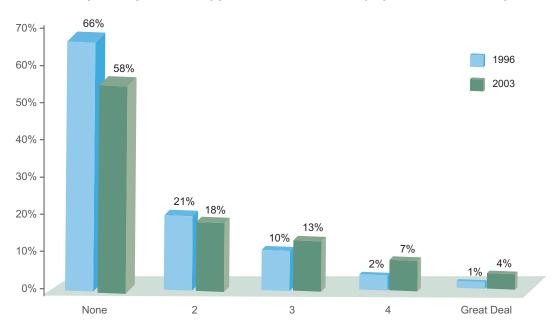
Average Clinical Hours Worked Per Week By Dental Hygienists		
Survey Year	Average	
1996	29	
2003 - 04	29	

Dentists Reporting that They Do Not Employ a Dental Hygienist Because They Cannot Find One		
Survey Year	Percent / Number	
1996	6% / (66)	
2003 - 04	2% / (37)	

Dental Hygienists, if You are Licensed but Do Not Currently Practice Clinically, Please Indicate if this Situation is (check one)				
	1996	2003-04		
Permanent	13%	23%		
Temporary*	27%	34%		
Not Sure*	60%	43%		

 $<sup>{}^*</sup>Of$  those indicating that they were not practicing and not permanently retired.

## Difficulty Finding a Dental Hygiene Position When Employment was Last Sought



#### **Footnotes**

#### **Section Footnotes**

## **Survey Methods**

Arizona Board of Dental Examiners Annual Report to the Governor, FY 2003/04.

#### **Provider Characteristics**

<sup>1</sup> Bureau of Labor Statistics: Bureau of the Census, Race / Ethnicity U.S., 2000.

#### Distribution of Providers

- <sup>1</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration State Health Workforce Profiles, 2000.
- <sup>2</sup> Arizona Board of Dental Examiners, 2005.
- <sup>3</sup> Arizona Department of Health Services, Division of Public Health Services, Public Health Prevention Services, Office of Health Systems Development, Health Professional Shortage Areas, Dental Health Professional Shortage Area Designations, September 2006.

## **Practice Characteristics**

<sup>1</sup> Arizona Health Care Cost Containment System, Dental Providers with at least one diagnostic, preventive or restorative claim, FY 2005.

## **Workforce Survey Comparisons**

- <sup>1</sup> Arizona Department of Health Services, Division of Public Health Services, Community and Family Health Services, Office of Oral Health. Survey of Dental Hygienists in Arizona's Workforce, June 1997.
- <sup>2</sup> U.S. Census Bureau, State & Country Quickfacts, Population Estimates, 1995 and 2005.
- <sup>3</sup> Board of Dental Examiners, Annual Report to the Governor, FY 96/97 and FY 04/05.

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